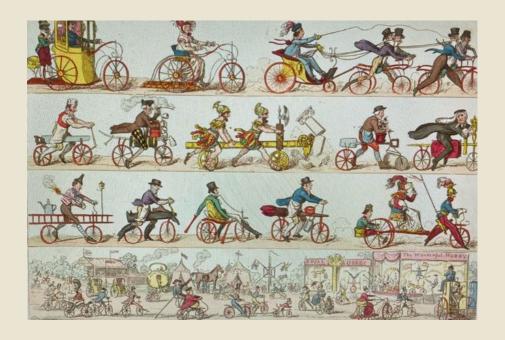
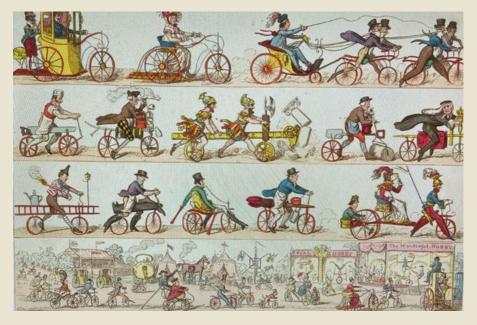
History of the bicycle



BN Goswamy

The long, uneven history of the bicycle BN Goswamy



A popular cartoon poster advertising bicycles

Life is like riding a bicycle: in order to keep your balance, you must keep moving. — Albert Einstein

The bicycle is the most civilised conveyance known to man. Other forms of transport grow daily more nightmarish. Only the bicycle remains pure in heart. — Iris Murdoch, novelist

That breeze against the skin of your face, that feeling of freedom that allures you, and turns you into a slave, forever. — Paola Gianotti, champion cyclist

I do not know how many remember their first encounter with a bicycle in their childhood, or their first bicycle ride, but I have a fair memory of it. A serious question to be decided on by my father and I, early on, was what to go in for - I must have been some 12 years of age then — a Hercules, a Raleigh, or a BSA, these being the three brands in the market at that time. We settled on a Raleigh and it was on that machine, I remember, that I had my first accident, gleefully rolling down a steep slope as I was. It kept me company for many years but not when I, as a young research fellow, started going to the university, cycling down from our home every day, but availing myself of my older sister's bike which was lying idle. That is when, at the end of a month, the keeper of the cycle-shed issued me a receipt for the princely sum rupees three and eight annas — that I paid for the facility. "Professor Lady Cycle" is how my name read on it: the keeper was aware that I was not a student but did not know my name yet. I kept that receipt for a long time.



Prototype of the first bicycle





Baron Drais and his invention, engraving

It all comes to mind now because the World Bicycle Day, as determined by the United Nations, fell just a few days ago: June 3; and the American Bicycle Month — May of each year — has just gone by. One was treated to the usual fare in the media: national leaders who have never gotten off a car in their lifetime it seems, exhorting everyone to take to cycling, for it is 'good for the system'; worthies including bureaucrats caught in photographs setting shakily off for their homes on bicycles — strictly for that day — followed by hangers-on; cycle dealers offering token discounts and advertising their ware: "An ever-saddled horse which eats nothing".



The Penny-Farthing cycle.

There was nothing novel in all this, neither information nor excitement, but I did decide to do at least something as the dedicated day and month were slipping by. I thought I will dig a bit and acquaint myself with the history of the much-celebrated machine. Not in preparation for taking to cycling again, but for raising my level of information about the world around myself. There was also the hope that I might learn something.



Michaux's son on a velocipede 1868

The bicycle was invented, I learnt, in Germany. The year was 1818, and the man to whom the credit for it goes (this is contested though by devoted doubters) was a member of the minor nobility of the land: Baron Karl von Drais. Driven in part by the fact that horses had been dying in large numbers due to some volcanic eruptions, he — by nature a tinkerer — came up with a two-wheeled contraption made of wood and steel which he called the

Laufmaschine, a 'running machine', so to speak. It had two in-line wheels beneath a seat and handlebars, propelled not by pedals — of these there were none — but by the rider pushing off the ground with his feet. There was no chain, no brake, but you managed. The invention, however slow and cumbersome — an early demonstration showed one could move on it at 9 miles per hour showed promise and soon there were versions of it that started appearing in England and France. But the going was not easy, for the clunking machines on uneven surfaces were seen as a hazard for pedestrians, even for the riders. Regulations were passed against the machine by various cities and authorities. Not until the 1860s appeared versions in which the rider could take his feet off the ground and balance on two wheels. Constantly, all along, features were being added by different inventors, different companies, for everyone could see that the machine had a future. The Wright Brothers, before they built their famous airplane, were building bicycles, one reads. A cycle with two unequal-sized wheels, the front one much larger than the one behind — the name given to it was 'Penny-Farthing', with reference to coins of two very varying sizes -came up with all its challenges but also all its excitement. Pedals had already been added; the Dunlop company introduced inflatable tyres which dramatically reduced the bumps and clunks; light spokes were added to the wheels to cut on exertion. And so on.



1886 Rover safety bicycle at the British Motor Museum. The first modern bicycle, it featured a rear-wheel-drive, chain-driven cycle with two similar-sized wheels. Dunlop's pneumatic tire was added to the bicycle in 1888.

It is an uneven history, that of this machine which was called by different names — including Draisine referring to the inventor Baron Drais — before everyone settled on 'bicycle'. One can go on and on citing names of inventors and companies, the successes and the failures, tales of acceptance and rejection. But the one thing that definitely came to be associated with the bicycle over time was a sense of exhilaration, of freedom. The kind that Paola Gianotti, whom I quote above, refers to. In the beginning, the machine was seen as a plaything for the

rich, the well-turned-out, something to show off. But slowly it became a thing for the working man, an item of easy transport. For women in particular — strait-laced as they were in Victorian days — it came as a means of liberation for they could get on it, bloomers and all, and wheel about in the city on their own. The Church objected, on grounds of decency; the upper crust was offended, for nearly everyone, including Blacks and the underprivileged, could swish past them on the street. But there has been no stopping the bicycle.

PS: While searching and writing a bit on the bicycle, have I learnt something, I ask myself?

Yes, for I would never otherwise have landed on Albert Einstein's brilliant words which I have cited above. And certainly not — also his words, but much less known — on what he wrote once on his Theory of Relativity: "I thought of that while riding my bicycle."